INDEX TO VOLUME 94

Names of contributors and of authors of books reviewed are printed in CAPITALS. Names of new genera, species, and combinations are printed in **bold face.** Numbers in bold face refer to pages where such a name is accompanied by a description or illustration. Numbers in *italic* refer to pages on which a name is listed as a synonym.

ABDUL-WAHAB, A. S. and E. L. RICE: Plant inhibition by Johnson grass and its possible significance in old-field succession, 486.

Acer rubrum seedling populations, root-shoot relationship of, 197.

ADAMS, J. EDISON: (see Greulach), 200.

"Additions and corrections to a flora of Rockland County, New York," 543.

African lake sediments, fungus spores in, 31, 480.

Agropyron scribneri and *Sitanion hystrix*, genome relations between, 395.

"An analysis of differential lateral growth in the stem of *Bauhinia surinamensis*," 404.

"Anthocyanins in *Cornus*," 108.

Aquamortierella elegans, 464.

"*Aquamortierella*, a new genus in the Mucorales," 464.

Attracting birds: from the prairies to the Atlantic (Review), 438.

Bacterial growth inhibitors, 125.

BAILEY, PAUL C., and KAREN BECHTELHEIMER LUQUIRE: The chromosome morphology of some Alabama populations of *Tradescantia*, 71; The chromosome morphology of some populations of *Tradescantia* exposed to chronic low-level radiation, 79.

BANKS, H. P.: (see Matten), 321.

BARD, GILY E.: The woody vegetation of the mature forest of the Mianus River Gorge Preserve, 336.

BASSON, P. W., and D. W. BIERHORST: An analysis of differential lateral growth in the stem of *Bauhinia surinamensis*, 404.

Bauhinia surinamensis, growth in stem of, 404.

"Behavior of the diploid nucleus in germinating teliospores of *Tolyposporium christenseni*," 191.

Benedict, Ralph Curtiss, obituary of, 107.

Berger, Rev. Charles A., obituary of, 194.

BERNARD, JOHN M., and DAVID E. FAIRBROTHERS: Ecologic and taxonomic information about *Quercus michauxii* Nutt. (swamp chestnut-oak) in New Jersey, 433.

BIERHORST, DAVID W.: (see Basson), 404.

"The biota of long-distance dispersal. V. Plant dispersal to Pacific Islands," 129.

"A biotic selection study utilizing *Muhlenbergia montana*," 423.

"Bluegreen algae from a Massachusetts salt marsh," 99.

BONNER, C. E. B.: *Index Hepaticarum* (Review), 200.

BONNER, JOHN T.: *The cellular slime molds*, (Review), 547.

Botanical Latin (Review), 110.

BRODIE, HAROLD J.: *Cyathus bulleri*, a hitherto undescribed fungus of the Nidulariaceae from the West Indies, 68.

BURGESS, ROBERT L., AHMAD MOKHTARZADEH, and LINDON CORNWALLIS: A preliminary bibliography of the natural history of Iran (Review), 439.

Caeoma conigenum, 523; strobilinum 537.

Calamovilfa, chromosome number in, 199.

CAPPELLINI, R. A.: (see Eyal), 63.

Canavalia (Leguminosae), xylem in, 162.

CARLQUIST, SHERWIN: The biota of long-distance dispersal V. Plant dispersal to Pacific islands, 129.

Ceanothus and *Salvia*, light competition between, 41.

The cellular slime molds (Review), 547.

Centennial program, 56.

"The chromosome morphology of some Alabama populations of *Tradescantia*," 71.

"The chromosome morphology of some populations of *Tradescantia* exposed to chronic low-level radiation," 79.

"Chromosome number in *Calamovilfa*," 199.

Chromosome numbers of Mexican grasses, 1.

Clavaria pinicola, 417; stillingeri, 417.

Climacium americanum, pitting in, 18.

"*Codium* reported from a New Jersey estuary," 57.

Competition between *Ceanothus* and *Salvia*, 41.

Cornus, anthocyanins in, 108.

INDEX TO VOLUME 94

Names of contributors and of authors of books reviewed are printed in CAPITALS. Names of new genera, species, and combinations are printed in **bold face.** Numbers in bold face refer to pages where such a name is accompanied by a description or illustration. Numbers in *italic* refer to pages on which a name is listed as a synonym.

ABDUL-WAHAB, A. S. and E. L. RICE: Plant inhibition by Johnson grass and its possible significance in old-field succession, 486.

Acer rubrum seedling populations, root-shoot relationship of, 197.

ADAMS, J. EDISON: (see Greulach), 200.

"Additions and corrections to a flora of Rockland County, New York," 543.

African lake sediments, fungus spores in, 31, 480.

Agropyron scribneri and *Sitanion hystrix*, genome relations between, 395.

"An analysis of differential lateral growth in the stem of *Bauhinia surinamensis*," 404.

"Anthocyanins in *Cornus*," 108.

Aquamortierella elegans, 464.

"*Aquamortierella*, a new genus in the Mucorales," 464.

Attracting birds: from the prairies to the Atlantic (Review), 438.

Bacterial growth inhibitors, 125.

BAILEY, PAUL C., and KAREN BECHTELHEIMER LUQUIRE: The chromosome morphology of some Alabama populations of *Tradescantia*, 71; The chromosome morphology of some populations of *Tradescantia* exposed to chronic low-level radiation, 79.

BANKS, H. P.: (see Matten), 321.

BARD, GILY E.: The woody vegetation of the mature forest of the Mianus River Gorge Preserve, 336.

BASSON, P. W., and D. W. BIERHORST: An analysis of differential lateral growth in the stem of *Bauhinia surinamensis*, 404.

Bauhinia surinamensis, growth in stem of, 404.

"Behavior of the diploid nucleus in germinating teliospores of *Tolyposporium christenseni*," 191.

Benedict, Ralph Curtiss, obituary of, 107.

Berger, Rev. Charles A., obituary of, 194.

BERNARD, JOHN M., and DAVID E. FAIRBROTHERS: Ecologic and taxonomic information about *Quercus michauxii* Nutt. (swamp chestnut-oak) in New Jersey, 433.

BIERHORST, DAVID W.: (see Basson), 404.

"The biota of long-distance dispersal. V. Plant dispersal to Pacific Islands," 129.

"A biotic selection study utilizing *Muhlenbergia montana*," 423.

"Bluegreen algae from a Massachusetts salt marsh," 99.

BONNER, C. E. B.: *Index Hepaticarum* (Review), 200.

BONNER, JOHN T.: *The cellular slime molds*, (Review), 547.

Botanical Latin (Review), 110.

BRODIE, HAROLD J.: *Cyathus bulleri*, a hitherto undescribed fungus of the Nidulariaceae from the West Indies, 68.

BURGESS, ROBERT L., AHMAD MOKHTARZADEH, and LINDON CORNWALLIS: A preliminary bibliography of the natural history of Iran (Review), 439.

Caeoma conigenum, 523; strobilinum 537.

Calamovilfa, chromosome number in, 199.

CAPPELLINI, R. A.: (see Eyal), 63.

Canavalia (Leguminosae), xylem in, 162.

CARLQUIST, SHERWIN: The biota of long-distance dispersal V. Plant dispersal to Pacific islands, 129.

Ceanothus and *Salvia*, light competition between, 41.

The cellular slime molds (Review), 547.

Centennial program, 56.

"The chromosome morphology of some Alabama populations of *Tradescantia*," 71.

"The chromosome morphology of some populations of *Tradescantia* exposed to chronic low-level radiation," 79.

"Chromosome number in *Calamovilfa*," 199.

Chromosome numbers of Mexican grasses, 1.

Clavaria pinicola, 417; stillingeri, 417.

Climacium americanum, pitting in, 18.

"*Codium* reported from a New Jersey estuary," 57.

Competition between *Ceanothus* and *Salvia*, 41.

Cornus, anthocyanins in, 108.

CORNWALLIS, LINDON: (see Burgess), 439.
Cronartium appalachianum, 517; coleosporioides, 525, 527, 535; comandrae, 535; comptoniae, 519; conigenum, 523; flaccidum, 532; fusiforme, 526; kamtschaticum, 531; occidentale, 532; quercuum, 517, 523, 526, 537; ribicola, 530, 536; strobilinum, 537.
CUMBIE, B. G.: Development and structure of the xylem in *Canavalia* (Leguminosae), 162.
"*Cyathus bulleri*, a hitherto undescribed fungus of the Nidulariaceae from the West Indies," 68.
Cyathus **bulleri** sp. nov., **68.**
Dalbergia paniculata, rust on, 84.
DAVIDSON, DONALD W.: (Review), 61.
DAVIS, BILL D.: (Review), 345
DAVISON, VERNE E.: *Attracting birds: from the prairies to the Atlantic*, (Review), 438.
"Development and structure of the xylem in *Canavalia* (Leguminosae)," 162.
DEWEY, D. R.: Genome relations between *Agropyron scribneri* and *Sitanion hystrix*, 395; Synthetic hybrids of *Agropyron scribneri* × *Elymus junceus*, 388.
DILCHER, D. L., and J. F. McQUADE: A morphological study of *Nyssa* endocarps from Eocene deposits in western Tennessee, 35.
Dispersal of plants to Pacific Islands, 129.
"Ecologic and taxonomic information about *Quercus michauxii* Nutt. (swamp chestnut-oak) in New Jersey," 433.
"Effect of age on root:shoot ratios in some herbaceous and woody plants—an appraisal," 498.
"Effects of temperature and nutrition on macromolecule production by thermophilic Eumycophyta," 175.
Elymus junceus, synthetic hybrid with *Agropyron scribneri*, 388.
EMBREE, R. W., and H. INDOH: *Aquamortierella*, a new genus in the Mucorales, 464.
Embryos of barley in culture, 223.
Eocene deposits, *Nyssa* endocarps in, 35.
ERDTMAN, G.: *Pollen morphology and plant taxonomy* (*Introduction to palynology* I.) (Review), 440.
Erica, floral morphology in, 243.
Eumycophyta, thermophilic, physiology of, 175.
EYAL, Z., J. L. PETERSON, and R. A. CAPPELLINI: Protein content and cell-wall weight of uredospores of five races of *Puccinia recondita* Rob. ex Desm. as affected by light and temperature, 63.
FAIRBROTHERS, DAVID E.: (Review), 200; (see Bernard), 433; (see Pickering), 468.
FINOCCHIO, ALFRED F.: Pitting of cells in moss gametophores, 18.
Fiske, Jessie Gladys, obituary of, 334.
FIVES, SISTER DOROTHY MARIE: (see Wolff), 411.
Floral morphology in the Ericales, 243.
FLOYD, G. L., and E. L. RICE: Inhibition of higher plants by three bacterial growth inhibitors, 125.
Fundamentals of phytomorphology (Review), 345.
"Fungus spores in East African lake sediments. IV," 31; VII," 480.
Genetics of sexuality in higher fungi (Review), 440.
"Genome relations between *Agropyron scribneri* and *Sitanion hystrix*," 395.
The geography of the flowering plants (Review), 61.
GOOD, RONALD: *The geography of the flowering plants* (Review), 61.
Grasses, Mexican, chromosome numbers of, 1.
GREULACH, VICTOR A., and J. EDISON ADAMS: *Plants: an introduction to modern botany* (Review), 200.
Grimmia **occidentalis, 461.**
"*Grimmia occidentalis*, a new species from North America," 461.
HALISKY, PHILIP M.: (Review), 440
HAUGE, RODGER: (see Muller), 182.
Hordeum, embryos of, in culture, 223.
Hylocomium splendens, pitting in, 18.
Hypnum apocladum, 22.
"The identity and status of the rust on *Dalbergia paniculata*," 84.
Index Hepaticarum (Review), 200.
Indian hill stations, phytogeography of, 230.
INDOH, H.: (see Embree), 464.
"The influence of initial salt status on absorption of rubidium by corn root segments of two stages of development," 501.
"Inhibition of higher plants by three bacterial growth inhibitors," 125.
"Inhibition of respiration by juglone in *Phaseolus* and *Lycopersicon*," 26.
"Interference by near ultraviolet and green

light with mitosis in the onion root tip meristem," 411.
Juglone, inhibition of respiration by, 26.
KLEIN, RICHARD M.: (see Wolff), 411.
KNORR, BETTY BENKERT: (Review), 438.
KORDAN, H. A.: Some notes on sterilization techniques, 544.
KORMAN, SAMUEL: (see Tendler), 175.
LAWTON, ELVA: *Grimmia occidentalis*, a new species from western North America, 461; Notes on *Sclæropodium*, with the description of a new species, 21.
LEHR, J. HARRY: Additions and corrections to a flora of Rockland County, New York, 543.
"Light competition between *Ceanothus* and *Salvia* shrubs," 41.
LUCENTE, RUDOLPH A.: (see Santamour), 108.
LUQUIRE, KAREN BECHTELHEIMER: (see Bailey), 71, 79.
Lycoperdon pini, *532*.
Lycopersicon esculentum, respiration inhibition in, 26.
Magnolia taxa, serological and disc electrophoretic investigation of, 468.
MATTEN, L. C., and H. P. BANKS: Relationship between the Devonian progymnosperm genera *Sphenoxylon* and *Tetraxylopteris*, 321.
McCORMICK, JACK: (Review), 439.
McPHERSON, J. K., and C. H. MULLER: Light competition between *Ceanothus* and *Salvia* shrubs, 41.
McQUADE, J. F.: (see Dilcher), 35.
MEEUSE, A. D. J.: *Fundamentals of phytomorphology* (Review), 345.
MEHER-HOMJI, V. M.: Phytogeography of the South Indian Hill Stations, 230.
Mianus River Gorge, vegetation of, 336.
MILLER, ROY V.: (see Quinn), 423.
Mitosis in onion, interference with, by near UV and green light, 411.
MOKHTARZADEH, AHMAD: (see Burgess), 439.
MONK, CARL D.: The root-shoot weight relationship of four widely separated seedling populations of red maple, 197.
"A morphological study of *Nyssa* endocarps from Eocene deposits in western Tennessee," 35.
Moss gametophores, pitting of cells in, 18.
Mucorales, a new genus in, 464.
Muhlenbergia montana, biotic selection in, 423.
MULLER, CORNELIUS H.: (see McPherson), 41.
MULLER, WALTER H., and RODGER HAUGE: Volatile growth inhibitors produced by *Salvia leucophylla*: effect on seedling anatomy, 182.
MURTY, Y. S.: (see Palser), 243.
Near ultraviolet and green light interference with mitosis, 411.
Nidulariaceae, a new species in, 68.
NISHIMOTO, MARGARET: (see Tendler), 175.
NORMAN, ELIANE M.: (Review), 201.
NORSTOG, KNUT: Studies on the survival of very small barley embryos in culture, 223.
"Notes on clavarioid fungi. VIII. *Clavaria pinicola* and *C. stillingeri*," 417.
"Notes on Mexican grasses VI. Miscellaneous chromosome numbers," 1.
"Notes on *Scleropodium*, with the description of a new species," 21.
Nyssa endocarps from Eocene deposits, 35.
Pacific islands, biota of dispersal to, 129.
PALSER, BARBARA F., and Y. S. MURTY: Studies of floral morphology in the Ericales. VIII. Organography and vascular anatomy in *Erica*, 243.
PARSONS, R. F.: Effect of age on root: shoot ratios in some herbaceous and woody plants—an appraisal, 498.
"The *Peridermium* species on pine stems," 511.
Peridermium appalachianum, 517; *betheli*, *535*; *buschmannae*, *532*; *carpetanum*, *532*; *cerebroides*, *527*; *cerebrum*, 517; *comptoniae*, 519; **conigenum**, **523**; *cornui*, *532*; *filamentosum*, 525; *fusiforme*, 526; *giganteum*, *517*; *globosum*, *517*; *harknessii*, 527; *himalayense*, *532*; *indicum*, 530; *insulare*, *532*; *kurilense*, 531; *mexicanum*, *523*; *occidentale*, 532; *pini*, 532; *pyriforme*, 535; *stalactiformе*, *525*, 535; *strobi*, 536; **strobilinum**, 537; *truncicola*, *532*.
PERRY, STEVEN F.: Inhibition of respiration by juglone in *Phaseolus* and *Lycopersicon*, 26.
PETERSEN, RONALD H.: Notes on clavarioid fungi. VIII. *Clavaria pinicola* and *C. stillingeri*, 417.
PETERSON, J. L.: (see Eylar), 63.
PETERSON, ROGER S.: The *Peridermium* species on pine stems, 511.
Phaseolus vulgaris, respiration inhibition in, 26.
"Phytogeography of the South Indian Hill Stations," 230.
PICKERING, JERRY L., and DAVID E. FAIRBROTHERS: A serological and

disc electrophoretic investigation of *Magnolia* taxa, 468.
Pine barrens, vegetational strata of, 87.
Pinus, Peridermium species on, 511.
"Pitting of cells in moss gametophores," 18.
"Plant inhibition by Johnson grass and its possible significance in old-field succession," 486.
Plants: An introduction to modern botany (Review), 200.
Pollen morphology and plant taxonomy. (Introduction to palynology I.) (Review), 440.
PORTER, C. L.: *Taxonomy of flowering plants* (Review), 201.
A preliminary bibliography of the natural history of Iran (Review), 439.
Progymnosperms of Devonian, 321.
"Protein content and cell-wall weight of uredospores of five races of *Puccinia recondita* Rob. ex Desm. as affected by light and temperature," 63.
Puccinia recondita, physiology of uredospores, 63.
QUINN, JAMES A., and ROY V. MILLER: A biotic selection study utilizing *Muhlenbergia montana*, 423.
Radiation of *Tradescantia*, 79.
RAGHUNATH, T.: Behavior of the diploid nucleus in germinating teliospores of *Tolyposporium christensenii*, 191.
RAJENDREN, RICHARD B.: The identity and status of the rust on *Dalbergia paniculata*, 84.
Ramaria **pinicola, 417.**
RAPER, JOHN R.: *Genetics of sexuality in higher fungi* (Review), 440.
REEDER, J. R., and D. N. SINGH: Chromosome number in *Calamovilfa*, 199.
REEDER, JOHN R.: Notes on Mexican grasses VI. Miscellaneous chromosome numbers, 1.
REINERS, W. A.: Relationships between vegetational strata in the pine barrens of central Long Island, New York, 87.
"Relationship between the Devonian progymnosperm genera of *Sphenoxylon* and *Tetraxylopteris*," 321.
"Relationships between vegetational strata in the pine barrens of central Long Island, New York," 87.
RICE, ELROY L.: (see Abdul-Wahab), 486; (see Floyd), 125.
RICKETT, H. W.: (Review), 110.
Root:shoot ratios, effect of age on, 498.
"The root-shoot weight relationship of four widely separated seedling populations of red maple," 197.
Rubidium, absorption by corn root, 501.
Salvia and *Ceanothus*, light competition between, 41.
Salvia leucophylla, growth inhibitors produced by, 182.
Salt marsh algae, 99.
SANTAMOUR, FRANK S., JR., and RUDOLPH A. LUCENTE: Anthocyanins in *Cornus*, 108.
Scleropodium caespitans, 21; *colpophyllum, 24;* **julaceum, 22**; *touretii*, 24.
Scopellopsis dalbergiae, 84.
Sediments, fungus spores in African Lake, 31, 480.
"A serological and disc electrophoretic investigation of *Magnolia* taxa," 468.
SHARP, A. J.: (Review), 200.
Shortia galacifolia: its life history and microclimatic requirements, 369.
SINGH, D. N.: (see Reeder), 199.
Sitanion hystrix and *Agropyron scribneri*, genome relations between, 395.
SMALL, JOHN A.: (Fiske obituary), 334.
SMITH, RICHARD C.: (see Venrick), 501.
SOLOMON, ALLEN M.: (Review), 440.
"Some notes on sterilization techniques," 544.
Sorghum halepense and succession, 486.
"Sourcebook of methods in developmental botany," 345.
Sphenoxylon, relationships of, 321.
Spores, fungus, in African lake sediments, 31, 480.
STEARN, W. J.: *Botanical Latin* (Review), 110.
Sterilization techniques, 544.
"Studies of floral morphology in the Ericales. VIII. Organography and vascular anatomy in *Erica*," 243.
"Studies on the survival of very small barley embryos in culture," 223.
Succession and plant inhibition, 486.
"Synthetic hybrids of *Agropyron scribneri* × *Elymus junceus*," 388.
Taxonomy of flowering plants (Review), 201.
TAYLOR, J. E.: *Codium* reported from a New Jersey estuary, 57.
Teliospores of *Tolyposporium*, germinating, 191.
TENDLER, M. D., SAMUEL KORMAN, and MARGARET NISHIMOTO: Effects of temperature and nutrition on macromolecule production by thermophilic Eumycophyta, 175.

Tetraxylopteris, relationships of, 321.
Thermophilic Eumycophyta, physiology of, 175.
Thuidium delicatulum, pitting in, 18.
Tolyposporium christensenii, nucleus in teliospores of, 191.
Tradescantia, chromosome morphology of, 71, 79.
VARNEY, EUGENE H.: (Review), 547.
Vegetational strata, 87.
VENRICK, DANA M., and RICHARD C. SMITH: The influence of initial salt status on absorption of rubidium by corn root segments of two stages of development, 501.
VIVIAN, V. E.: *Shortia galacifolia:* its life history and microclimatic requirements, 369.
"Volatile growth inhibitors produced by *Salvia leucophylla:* effect on seedling anatomy," 182.
WEBBER, E. E.: Bluegreen algae from a Massachusetts salt marsh, 99.
WITKUS, E. R.: (Berger obituary), 194.
WOLF, FREDERICK A.: Fungus spores in East African Lake sediments. IV., 31; VII, 480.
WOLFF, E. G., SR. D. M. FIVES, and R. M. KLEIN: Interference by near ultraviolet and green light with mitosis in the onion root tip meristem, 411.
"The woody vegetation of the mature forest of the Mianus River Gorge Preserve," 336.
Xylem in *Canavalia* (Leguminosae), 162.